

AMENDMENTS TO THE CLAIMS

1-18. (Canceled)

19. (Currently Amended) A system for transferring data from a data source to multiple data sink objects, the system comprising:

a data source holding acquired data;

an interface for communicating with the data source to receive the data from the data source;

a plurality of data sink objects including one or more application software tools or a ~~representation of~~ one or more output devices;

a processor controlling a data processor that encapsulates the received data into a data object;

one or more memory storages for storing the data object along with a data object pointer and a data server object, the data object pointer indicating a location of the data object in the one or more memory storages to identify the data object, the data server object for:

posting the data object along with the data object pointer;

registering one or more of the plurality of data sink objects with the data server object;

transferring to the one or more registered data sink objects ~~identification information identifying the data object pointer, the data server object providing a pointer indicating a location of the data object in the memory to identify the data object, the one or more registered data sink objects accessing the data object using the identification information~~ data object pointer; and

sharing the data object among the one or more registered data sink objects to prevent extraneous copies of the received data.

20. (Previously Presented) The system of claim 19 wherein the data server object includes a list listing the one or more registered data sink objects that are registered with the data server object.

21. (Previously Presented) The system of claim 19 wherein the computer system provides a technical computing environment.
22. (Canceled)
23. (Previously Presented) The system of claim 19 further comprising at least one data listener object that is registered to a respective one of the one or more registered data sink objects.
24. (Previously Presented) The system of claim 23, wherein the respective one of the one or more registered data sink objects deletes each of the at least one data listener object registered with the respective one of the one or more registered data sink objects when the respective one of the one or more registered data sink objects is deleted.
25. (Previously Presented) The system of claim 23, wherein the respective one of the one or more registered data sink objects notifies each of the at least one data listener object registered with the respective one of the one or more registered data sink objects when the respective one of the one or more registered data sink objects is deleted.
26. (Previously Presented) The system of claim 23, wherein the respective one of the one or more registered data sink objects notifies each of the at least one data listener object when the respective one of the one or more registered data sink objects is updated with a new data object.
27. (Original) The system of claim 19 wherein the data source provides data sequence continuously for a period of time.
28. (Original) The system of claim 19 wherein the data source provides a package of data, the package of data being used independently of other packages of data.
29. (Original) The system of claim 28 wherein the package of data includes a frame of image data.

30. (Original) The system of claim 28 wherein the package of data includes a scan of radar, sensor, or audio data, as well as network data packets.
31. (Previously Presented) The system of claim 19 wherein the data processor configures a maximum amount of memory that all data objects use[s] at a given instance of time.
32. (Previously Presented) The system of claim 19, wherein the processor is 64 bits or more.
33. (Currently Amended) The system of claim 19 wherein the interface, the data processor, and the data server object are implemented independently of MATLAB®.
34. (Currently Amended) A physical computer readable medium holding instructions executable in a computer system, wherein the computer system receives data from a data source and transfers the data to data sink objects, the medium holding:
- one or more instructions for communicating with the data source to receive the data from the data source;
 - one or more instructions for encapsulating the data into a data object in a memory;
 - one or more instructions for posting the data object along with a data object pointer to a data server object, the data object pointer indicating location of the data object in the memory;
 - one or more instructions for registering the data sink objects with ~~a~~ the data server object, the data sink objects including one or more application software tools or ~~a representation of one~~ or more output devices;
 - one or more instructions for the data server object transferring to the registered data sink objects ~~identification information identifying the data object pointer, the data server object providing a pointer indicating a location of the data object in the memory to identify the data object, the data sink objects accessing the data object using the~~ data object pointer ~~identification information;~~ and
 - one or more instructions for sharing the data object among the data sink objects to prevent extraneous copies of the data.
35. (Previously Presented) The medium of claim 34 further comprising a data sink listener object that is registered with one or more of the registered data sink objects.

36. (Previously Presented) The medium of claim 34 wherein the computer system provides a technical computing environment.
37. (Previously Presented) The medium of claim 35 wherein the data sink listener object performs a task relating to a function of a respective one of the registered data sink objects.
38. (Previously Presented) The medium of claim 35 wherein the data sink listener object performs a task relating to a function of a respective one of the registered data sink objects on a thread of the data server object.
39. (Previously Presented) The medium of claim 35 wherein the data sink listener object performs a task relating to a function of a respective one of the registered data sink objects on a thread different from that of the data server object.
40. (Previously Presented) The medium of claim 34 wherein at least one of the registered data sink objects performs a function on a thread of the data server object.
41. (Previously Presented) The medium of claim 34 wherein at least one of the registered data sink objects performs a function on a thread different from that of the data server object.
42. (Currently Amended) The medium of claim 34 wherein the instructions are run independently of MATLAB®.
43. (Original) The medium of claim 34 wherein the instructions are originated from code written with C programming language.
44. (Currently Amended) The medium of claim 34 wherein the instructions are originated from code written with an object-oriented programming language, the object-oriented programming language comprising one or more of C++, C# and Java™.